A/B Testing: Changing the "Add to Shopping Bag" Button Color

Introduction

This guide explains how to implement an A/B test on IKEA's product pages. The test randomly changes the "Add to Shopping Bag" button color to **yellow** for **50% of users** and remembers this choice for future visits. If a user initially sees the button in yellow, it will always remain yellow for them.

Prerequisites

- Basic JavaScript knowledge
- Access to IKEA's website
- Developer Console (F12 → Console tab in Chrome)
- Local Storage enabled in the browser

How It Works

The script does the following:

- 1. Checks if a button color variant is already stored in localStorage.
- 2. If not, randomly assigns a variant (50% chance of being yellow).
- 3. Saves this variant in localStorage so it remains the same on future visits.
- 4. Applies the color change accordingly.

Implementation Steps

1. Inject the Script

Copy and execute the following JavaScript snippet in your browser's **Developer Console** or add it to the site's global script section.

```
(() => {
```

```
const getStoredVariant = () =>
localStorage.getItem("buttonColorVariant");
    const setStoredVariant = (variant) =>
localStorage.setItem("buttonColorVariant", variant);
    const applyButtonColor = (variant) => {
        const button = document.querySelector(".add-to-cart-
button");
        if (button) {
           button.style.backgroundColor = variant === "yellow" ?
"yellow" : "blue"; // Explicitly set default to blue
    } ;
    let variant = getStoredVariant() || (Math.random() < 0.5 ?</pre>
"yellow" : "default");
    setStoredVariant(variant);
    applyButtonColor(variant);
})();
```

2. How It Works

User Action	Expected Behavior
First visit to product page	50% chance button is yellow, 50% remains blue
Returning visit	Button keeps its assigned color
New session (same user)	Color remains the same as first visit
Clearing browser storage	Random color assignment happens again

3. Testing the Script

Step 1: Open Developer Console

- 1. Open Chrome Developer Tools (F12 → Console tab).
- 2. Paste and execute the JavaScript snippet.

Step 2: Reload the Product Page

- The "Add to Shopping Bag" button is blue by default.
- The A/B test randomly changes it to yellow for 50% of users.
- If assigned yellow, it will stay yellow on subsequent visits.
- If not assigned yellow, it remains blue.

Step 3: Validate Storage

• Open the Console and enter:

```
localStorage.getItem("buttonColorVariant");
```

- Expected output:
 - o "yellow" → Button should always stay yellow.
 - o "default" → Button remains unchanged.

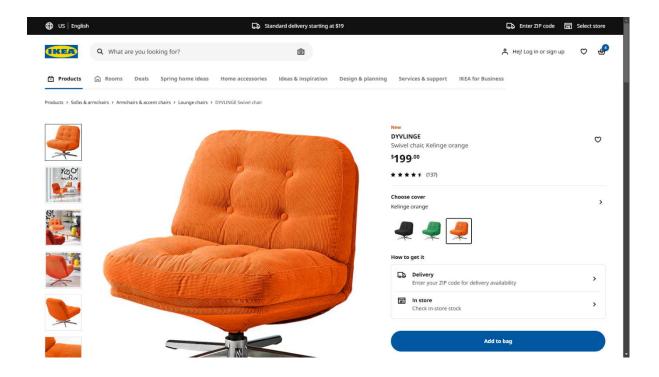
Step 4: Reset A/B Test (For Testing Purposes)

• To force a new random assignment:

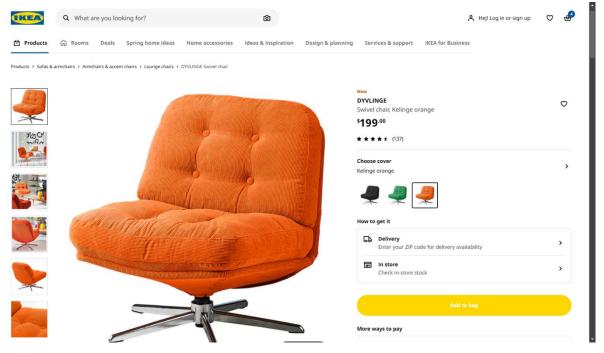
```
localStorage.removeItem("buttonColorVariant");
```

4. Screenshots

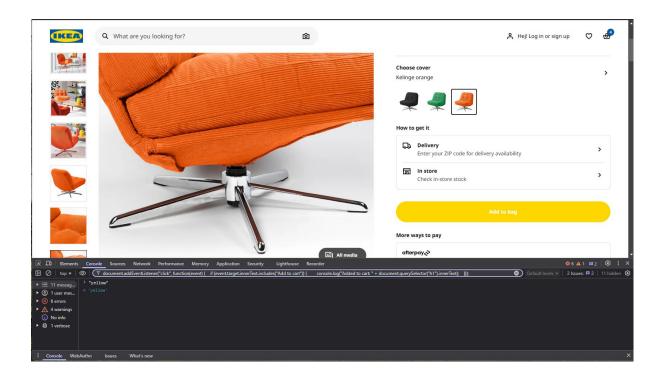
1. Product Page - Default Button Color



2. Product Page - Button Turned Yellow (A/B Test Triggered)



3. Developer Console - Checking Assigned Variant in localStorage



Conclusion

This script effectively assigns a persistent button color variant to users, ensuring a consistent experience for each visitor.